

WICKLOW - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Enniskerry Delta		
Other names used for site	Fassaroe Delta		
IGH THEME	IGH7 Quaternary		
TOWNLAND(S)	Fassaroe		
NEAREST TOWN/VILLAGE	Enniskerry		
SIX INCH MAP NUMBER	3, 4, 7, 8		
ITM CO-ORDINATES	723500E 717600N (centre of feature)		
1:50,000 O.S. SHEET NUMBER	56	GSi BEDROCK 1:100,000 SHEET NO.	16

Outline Site Description

The Enniskerry Delta includes a large accumulation of sands and gravels which has been quarried extensively historically, just outside Enniskerry town.

Geological System/Age and Primary Rock Type

The 'delta' is comprised of deep glaciofluvial and glaciolacustrine sediments and bedrock is at great depths throughout the area of the feature. This bedrock is of Ordovician age, and consists of greywackes, schists and slates. The 'delta' is Quaternary in age, having been deposited at the edge of the northward-retreating ice sheet during deglaciation after the last Ice Age.

Main Geological or Geomorphological Interest

The delta is a striking feature, a large sand and gravel accumulation deposited into Glacial Lake Enniskerry by meltwaters flowing from ice of the large glacier which occupied the Irish Sea and encroached inland into Wicklow, as it stood between Carrickgollogan and Bray Head. The delta was built out from this ridge into the lake, the surface of which was at about 100m above present sea level. The delta surface at this level can be viewed from the road from Old Connaught to Enniskerry, where one gets an impression of this large, level surface dissected by the small stream that flows from the mouth of The Scalp.

The delta is just under 3 kilometres long and up to 2.5 kilometres wide, covering an area of approximately 6 square kilometres. The 'sands and gravels' are comprised largely of limestone from the Irish Midlands (no limestone bedrock occurs in Wicklow). The sediments are arranged in the typical delta sequence: topset gravels composed of up to 2m depth of horizontally bedded gravels on top; foreset gravels which are steeply dipping and well bedded deposited at the front of the delta; and bottomset, finer sediments of sands and silts, usually underlying the foresets and representing sediment that was originally deposited beyond the steep delta front on the lake floor. There are many old gravel pits in the area around Fassaroe itself, but exposure is poor today.

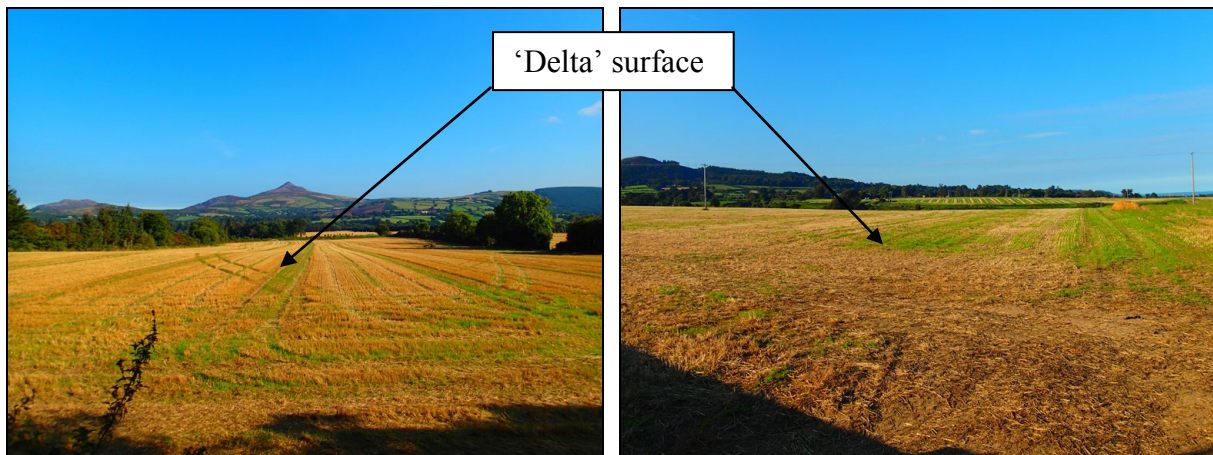
The delta also affords a very fine view of the Scalp to the northwest, through which much of the sediment making up the delta feature passed. To the south, the low point on the skyline between the two Sugar Loaves indicates the position of the Glen of the Downs.

Site Importance – County Geological Site

The feature is a high, striking example of a dry sand and gravel ridge, and stands proud of the surrounding landscape. This is an excellent example of a deglacial, ice marginal, meltwater-deposited feature.

Management/promotion issues

Much of the delta has been removed by quarrying, and access to pits is by permission of the owners or operators and subject to safety protocols. Viewing from the Old Connaught to Enniskerry road, as detailed above, is the best means of viewing the delta surface.



Two views across the flat surface of the Enniskerry Delta at Fassaroe.



View southwest towards Powerscourt Estate, across the delta feature.



Small channel at the edge of the southern edge of the delta near Fassaroe House.

